Jon Niermann, *Chairman Emily Lindley, Commissioner*Toby Baker, *Executive Director* 



# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

February 1, 2019

Mr. Kenneth Shewmake, Remedial Project Manager US Environmental Protection Agency, Region 6 Superfund Division (6SF-TR) 1445 Ross Ave., Suite 1200 Dallas, Texas 75202-2733

Re: Sampling and Analysis Plan for Remedial Investigation, Revision 00, December 11, 2018, Lane Plating Works, Inc. Federal Superfund Site (TXN000605240), Dallas, Dallas County, Texas

#### Dear Mr. Shewmake:

Thank you for providing the Texas Commission on Environmental Quality (TCEQ) an opportunity to review the Sampling and Analysis Plan for Remedial Investigation, Revision 00 (report) for the Lane Plating Works, Inc. Superfund Site (site). The TCEQ Superfund Section comments regarding this report are listed below. The TCEQ Division Support and Toxicology Section comments that are specific to the ecological and human health subject matter in this report are included as attachments.

- 1. Section 1.1.4.1, last paragraph the TCEQ recommends adding a statement from the Conceptual Site Model Technical Memorandum (CSMTM) (October 2018), Section 4.2, last sentence, that indicates "The list of COPCs will be refined as the investigation progresses, which may result in identification of additional COPCs."
- 2. Section 1.3.2.1, last paragraph and Section 2.6.1, sixth paragraph the report specifies Matrix spike/Matrix spike duplicates (MS/MSDs) samples are generated for organic analytes or methods. The TCEQ notes that in Table 3, MS/MSDs are listed for both organic and inorganic analyses and Laboratory control sample/Laboratory control sample duplicates (LCS/LCSDs) are listed for organic analyses only.
- 3. Section 1.5.4, last bullet the TCEQ recommends including sample location maps as the minimum required figures as part of the Data Evaluation Summary Report.
- 4. Section 2.1, Phase 1 investigation elements for ground water, soil, and surface water and sediment sampling
  - a. The TCEQ notes that cyanide is one of the additional analyses planned for sample subsets (10 percent) of ground water, soil, and surface water and sediment samples collected during Phase 1. The TCEQ recommends increasing the percentage of sample subsets that will include cyanide analysis for all media as cyanide is identified as a site contaminant of potential concern (COPC) in Section 1.1.4.1 of the report.
  - b. The TCEQ notes the current total petroleum hydrocarbon (TPH) analysis planned is by method TX1005. The TCEQ requests clarification of the EPA's intended use of TPH data collection. If the EPA anticipates using fractionated TPH data for future risk calculations, the TCEQ recommends running additional analysis of

P.O. Box 13087 • Austin, Texas 78711-3087 • 512-239-1000 • tceq.texas.gov

TPH by TX1006 on samples with detected concentrations of TPH by TX1005 to determine risk-based cleanup levels for each identified TPH source type.

- 5. Section 2.1, Phase 1 investigation element for surface water and sediment sampling, last paragraph, first sentence, Section 2.3.4.3, first paragraph, first sentence, and Appendix A, Figures A-3 and A-4 the report indicates surface water and sediment samples collected under Phase 1 will include the closest stock pond situated east of the site; however, the TCEQ notes that Figures A-3 and A-4 do not show Phase 1 sediment or surface water samples located in either of the stock ponds. Please update Figures A-3 and A-4 to reflect the proposed sampling of the closest, smaller stock pond during Phase I Additionally, the TCEQ acknowledges that the second, larger stock pond sampling may wait until Phase 2, if needed.
- 6. Section 2.3.1, first paragraph the TCEQ requests clarification on whether ground water samples collected for dissolved metals analysis will be field-filtered using a 0.45-micron disposable filter, as described for surface water samples in Section 2.3.4.1. Additionally, the report and Standard Operating Procedures (SOPs) do not indicate if water samples for total metals analysis will be field-filtered should turbidity readings remain above 10 nephelometric turbidity units (NTU).

#### 7. Section 2.3.2.1 and 2.3.3 -

- a. The TCEQ notes that the soil sampling methodology in this report specifies grab samples collected from discrete locations and differs from the methodology used in the EPA Removal Action, which used composite 5-point soil sampling from a grid system. The TCEQ recommends future reports that include both datasets provide a statement to explain how they are comparable.
- b. Paragraphs four and two of Sections 2.3.2.1 and 2.3.3, respectively, indicate surface soil samples will be collected from the 0.0 to 0.5 foot (ft.) and 0.5 to 2.0 ft. intervals. The TCEQ considers direct contact exposure pathways for soil to a depth of 5 feet below ground surface (ft. bgs.) for Commercial/Industrial land use and a depth of 15 ft. bgs. for residential land use (30 TAC 350.4(a)(88) in the Texas Risk Reduction Program (TRRP) rule (TCEQ 2009)). The TCEQ recommends collecting additional soil samples in Phase 1 if there are field indicators of contamination below 2 ft. bgs. and in Phase 2 if Phase 1 soil sampling does not delineate contamination to 2 ft. bgs. The TCEQ will not be able to concur on unrestricted land use if the 2 ft. sample intervals exceed screening levels protective of direct contact in soils.
- 8. Section 2.3.4.3, first paragraph, second sentence the TCEQ requests clarification of the definition of potential point of entry (PPE) in this report versus the HRS. The HRS identifies four PPE locations, none of which are planned sampling locations in this report. The HRS additionally indicates that the PPEs represent focal points of entry of the sheet-flow pattern into surface water bodies and any point on the segment of Stream 5A2, the small stock pond, the unnamed stream, or the wetland layer that is intersected by overland flow from the site could be considered a PPE.
- 9. Section 2.3.4.3, first paragraph, last sentence the TCEQ notes that Phase 1 sampling is not scoped to include sample collection from Five Mile Creek located south of the site drainage system. As the CSMTM recognizes, Five Mile Creek may connect to the site drainage system during flood events. Although a connection was not observed during the SI, the TCEQ recommends EPA consider sampling Five Mile Creek during future RI sampling if contamination is confirmed present in the site drainage system.

- 10. Section 2.3.4.3, second paragraph, second bullet, "All sediment samples will be collected from 0.0-0.5 ft bgs" the TCEQ requests justification for the selected sediment sampling depth. The sediment sampling depth interval should account for the known biologically active zone as well as any potential for resuspension/exposure of COPCs that may be found at greater depths. Additionally, TRRP defines the sediment point of exposure (POE) for human health as the upper one foot of sediment (30 TAC 350.37(k)). Therefore, samples collected for evaluation of human health pathways may be inappropriate for ecological risk assessments. Field observations of sediment characteristics (color intervals, texture and consistency, and biological inclusions) and physical mechanisms (deposition and erosion) should also be accounted for when selecting the sampling interval. For more information, please see Sections 3.1.3 and 3.2.3.1 of TRRP-15eco (TCEQ 2013), and Section 2.8 of RG-263 (TCEQ 2018).
- 11. Section 2.3.4.3, last paragraph the report discusses a wetlands survey; however, no other mention of a wetlands survey is indicated in the planned RI Phase 1 scope of work. The TCEQ agrees a wetlands survey should be completed if contamination is verified in the surface water pathway.
- 12. Section 2.3.10, fourth bullet the TCEQ notes that the term "surface water" is incorrectly used in place of "sediment" in this bullet and should be corrected.
- 13. Section 2.3.10, ninth bullet the TCEQ notes that the third field example given "190701" does not correctly match the example date and should be corrected to "190902."
- 14. Section 2.3.11, first paragraph the TCEQ recommends using a blind field duplicate nomenclature instead of adding a "-D" to the parent sample designation.
- 15. Table 2, Data Quality Objectives
  - a. Step 2 the TCEQ recommends adding the following objectives:
    - i. Confirm no active private wells that may be unregistered or unlisted are in the site vicinity by completing a field receptor survey.
    - ii. Evaluate the hydraulic gradient of the shallow ground water bearing unit(s) in the site vicinity.
    - iii. Evaluate and delineate the small, interconnected streams and ponds of the surface water pathway located east of the site.
  - b. Step 5, third bullet, "If it does pose a risk or the possibility of a continuing release to ground water," the TCEQ recommends revising this to "If it does pose a risk or the possibility of a continuing release to ground water and surface water," because overland flow may release soil contaminants directly to the surface water pathway.
  - c. Step 7 the TCEQ recommends the following revisions:
    - i. Fourth bullet, "Ground water samples will be collected from the existing on-site well," revise to "Ground water samples will be collected from the existing on-site wells," because there are two existing site water wells.
    - ii. Sixth bullet, "Soil borings and soil samples will be collected during Phase 1 to delineate soil contamination and confirm source areas," revise to "Soil borings and soil samples will be collected during Phase 1 to delineate soil contamination and confirm source areas and site lithology."
- 16. Table 6, Standard Operating Procedures the TCEQ notes that Standard Operating Procedure (SOP) number 032 is not provided in Appendix C.

- 17. Appendix A tables, general comment the TCEQ recommends adding some field blank samples under the Quality Control (QC) samples count in case field conditions necessitate collection, as described in Table 7.
- 18. Appendix A, Table A-1, Sampling Design Matrix Phase 1 Ground Water Sampling the TCEQ notes an existing site water well is designated for sample subsets additional analyses. The TCEQ recommends designating a monitoring well for the additional analyses instead of a site water well because the well construction information will be known and constrained to site specifications.
- 19. Appendix A, Table A-2, Sampling Design Matrix Phase 1 Soil Sampling the TCEQ recommends changing the designated sample subsets additional analyses for DSB-2 and MW-2 to DSB-3 or DSB-4 and MW-3, respectively. DSB-3 and DSB-4 are located in the vicinity of a former soil waste pile and known soil contamination (previous sample locations I10 and J10). MW-3 is located in closer proximity to known contaminated soil areas and the overland route.
- 20. Appendix A, Table A-3, Sampling Design Matrix Phase 1 Sediment Sampling the sampling tool is not designated as disposable. If using nondedicated equipment, all analytical methods should be included in equipment blank analysis.
- 21. Appendix A, Table A-4, Sampling Design Matrix Phase 1 Surface Water Sampling
  - a. The sampling depth is indicated as 0.0-1.0 feet below surface or shallower; however, Section 2.3.4.3 of the report indicates a depth of 0.0-0.5 feet. The table and report should be updated for consistency.
  - b. The table notes indicate "Analyses for hexavalent chromium may be eliminated if it is not detected in soil or ground water samples." The TCEQ recommends adding sediment to this statement.
- 22. Appendix A, Table A-5, Sample Design Matrix Investigation-Derived Waste Sampling the TCEQ notes that TCLP Metals analysis is listed twice in this table.
- 23. Appendix A figures, general comment the TCEQ recommends adding "Proposed" to figure titles as specific sample locations will likely change in the field.
- 24. Appendix A, Figure A-1, Phase 1 Remedial Investigation Monitoring Well and Water Well Sample locations
  - a. The TCEQ notes that two of the three proposed monitoring well locations are situated adjacent to a stream or pond in the site vicinity, most likely with the goal of evaluating the surface water to ground water pathway as stated in Table 2, Step 2. The TCEQ recommends that Phase I monitoring wells be situated to confirm the presence of contamination in shallow ground water and located in potential source areas. The ground water to surface pathway could be evaluated in Phase 2, if needed. Alternatively, ground water samples could be collected in additional locations by installing temporary wells in Phase 1 or Phase 2 prior to installing additional permanent monitoring wells. Temporary wells could overlap with soil boring locations in suspected source areas.
  - b. The TCEQ additionally recommends placing monitoring wells 1) adjacent to the site water wells for comparison of analytical data because the water wells have unknown depths and screen intervals, and 2) at an upgradient location.

- 25. Appendix A, Figure A-2, Phase 1 Remedial Investigation Soil Sample locations
  - a. The TCEQ notes that the Regional Screening Level (RSL) values listed for chromium are for trivalent chromium and recommends adding a note on the figure to explain this.
  - b. The TCEQ recommends adjusting the sample location for JSB-1 to the fence line south of the site facility building where ponded water has been observed to collect after rain events to assess this location as a potential source area (HRS, Reference 14, page 5, photo 10).
  - c. The TCEQ recommends adjusting the sample location for DSB-6 to the area south of F7 where there is a gap in planned nature and extent sample locations.
  - d. The TCEQ recommends adding potential source area soil boring locations near previous sample locations I10 and G5, where some of the deepest known exceedances of RSLs are located, to determine the vertical extent of contamination. This may be considered in future RI sampling as well.
- 26. Appendix A, Figures A-3 and A-4, Phase 1 Remedial Investigation Sediment and Surface Water Sample locations
  - a. The TCEQ notes that there is a rectangular depression area situated between the site facility building and small stock pond and near the overland route that may be frequently or permanently filled with water (HRS, Reference 14, page 13, photo 26). This feature was not sampled during the SI. The TCEQ strongly recommends EPA sample surface water and sediment from this feature during Phase I by adding to or rearranging current planned sample locations.
  - b. The TCEQ notes the stream layer on these figures may not be accurate and the interconnected stream network east of the site is complex, branching, and not fully mapped. The EPA should be prepared to modify planned sediment and surface water locations as needed based on field conditions.
- 27. Appendix D tables, general comments
  - a. Table notes should be updated to indicate which chromium screening values are based on trivalent chromium.
  - b. Table note 1 should be updated with the most recent RSLs (November 2018).
  - c. Several screening values contain errors. Screening values should be quality controlled (QC) to ensure accuracy and use of the most recent, updated values.
- 28. Appendix D, Table D-1B, Screening Criteria for Soil and Private Laboratory Reference Limits table note 5 should be updated with the most recent TCEQ PCLs (April 2018). Additionally, the following information should be added in this note: total soil combined for a 0.5-acre source area.
- 29. Appendix D, Tables D-2A and D2B, Screening Criteria for Ground Water and CLP Reference Limits and Private Laboratory Reference Limits
  - a. Table D-2A Chromium has a note 8 next to it, but there is no associated note in the table.
  - b. Table D2A The MCL for cadmium is 5 ug/L.
  - c. Note 3 regarding TCEQ PCLs should be updated to indicate residential values.
- 30. Appendix D, Tables D-4A and D-4B, Screening Criteria for Surface Water and CLP Reference Limits and Private Laboratory Reference Limits
  - a. A note should be added to cite the source of the TRRP Ecological Benchmarks.
  - b. The TCEQ recommends adding the following to Table note 2: "The TSWQS Human Health for Fish Only Consumption value multiplied by 10 represents the value for an incidental fishery, as discussed in the TCEQ Regulatory Guidance

Mr. Kenneth Shewmake, Remedial Project Manager Page 6 February 1, 2019

RG-366/TRRP 24 "Determining PCLs for Surface Water and Sediment" (December 2007)." Refer to this guidance to determine applicability to site data.

c. Table D-4B – National Recommended Water Quality Criteria, Aquatic Life Freshwater Chronic screening values are incorrect for alkalinity and pH.

If you have any questions regarding these comments, please contact me at (512) 239-2466 or rebecca.storms@tceq.texas.gov.

Sincerely,

Rebecca Storms, P.G., Project Manager

Superfund Section Remediation Division

Texas Commission on Environmental Quality

RS/dl

Enclosure

cc: Greg Zychowski, Division Support Section, Remediation Division, Texas Commission on Environmental Quality, MC-102, 12100 Park 35 Circle, Bldg. D, Austin, TX 78753

Tracie Phillips, Ph.D., Toxicology Section, Toxicology Division, Texas Commission on Environmental Quality, MC-168, 12100 Park 35 Circle, Bldg. F, Austin, TX 78753

Communication ID: 23968867

# **TCEQ Interoffice Memorandum**

**To:** Rebecca Storms

Superfund Section Remediation Division

From: Tracie Phillips, Ph.D.

**Toxicology Division** 

**Date:** January 16, 2018

**Subject:** Toxicology Division Review of the Sampling and Analysis Plan for the Remedial

Investigation for the Lane Plating Works Federal Superfund Site, Dallas County,

Texas.

Staff of the Toxicology Division (TD) reviewed the December 11, 2018 Sampling and Analysis Plan for the Remedial Investigation for the Lane Plating Works Federal Superfund Site located in Dallas County, Texas. To the extent possible, the TD reviewed the proposed human health screening levels to ensure compliance with the Texas Risk Reduction Program (TRRP; 30 TAC §350) rule. TD's review focused on the tables in Appendix D of the document that deal with human health screening levels for site-related contaminants. Other issues discussed in the document (e.g., ecological screening levels) were not reviewed.

## Screening Criteria for Soil (Tables D-1A and D-1B)

While tables D-1A and D-1B provide several different types of soil screening levels for consideration as the overall project screening levels, the TCEQ TRRP residential total soil combined (TotSoil<sub>Comb</sub>) protective concentration levels (PCLs) were not included in the Table D-1A, but they were included in Table D-2A. There are two analytes from Table D-1A with TotSoil<sub>Comb</sub> PCLs that are lower than the proposed project screening level (cis-1,2-dichloroethene and 2-nitroaniline) (see Table 1). There are three analytes from Table D-1A without a proposed project screening level that do have TotSoil<sub>Comb</sub> PCLs (4-bromophenyl-phenylether, 4-chlorophenyl-phenylether, and carbazole) (see Table 1).

In addition, total PCBs are not listed as an analyte in Tables D-1A or D-1B, unlike all the other Appendix D tables. For consistency, total PCBs should be considered as an analyte here, or an explanation of why it was excluded should be provided.

Table 1. Analytes from Table D-1A with TotSoilComb PCL values that should be considered

| CASRN    | Project<br>Screening Level<br>(mg/kg) | Residential  TotSoil <sub>Comb</sub> PCL  (mg/kg) |
|----------|---------------------------------------|---|
| 156-59-2 | 160                                   | 140   |
| 88-74-4  | 74.1                                  | 14  |
|          | <b>CASRN</b><br>156-59-2<br>88-74-4   | Screening Level (mg/kg) 156-59-2 160              |

|                            |           | Project                    | Residential                             |
|----------------------------|-----------|----------------------------|---|
| Analyte                    | CASDN     | Screening Level<br>(mg/kg) | Tot Soil <sub>Comb</sub> PCL<br>(mg/kg) |
|                            | ,         | (IIIg/ kg)                 | (IIIg/kg)                               |
| 4-Bromophenyl-phenylether  | 101-55-3  | NS                         | 0.28                                    |
| 4-Chlorophenyl-phenylether | 7005-72-3 | NS                         | 0.16                                    |
| Carbazole                  | 86-74-8   | NS                         | 230                                     |

### Screening Criteria for Ground Water (Tables D-2A and D-2B)

While tables D-2A and D-2B provide several different types of ground water screening levels for consideration as the overall project screening levels and do include TCEQ TRRP residential groundwater ingestion (<sup>GW</sup>GW<sub>Ing</sub>) PCLs, some analytes on Table D-2A did not utilize the lower TRRP <sup>GW</sup>GW<sub>Ing</sub> PCLs as the proposed project screening level. Two analytes, bromodichloromethane and dibromochloromethane, have <sup>GW</sup>GW<sub>Ing</sub> PCLs that are lower than the proposed EPA MCL (see Table 2).

In addition, there are two errors in the  $^{GW}GW_{Ing}$  PCLs used. The first is for total PCBs on Table D-2A, which lists no values available. However, total PCBs has a  $^{GW}GW_{Ing}$  PCL of 0.5 µg/L, which should be utilized as the proposed project screening level. The second error is on Table D-2B for the  $^{GW}GW_{Ing}$  PCL listed for hexavalent chromium; 0.0001 mg/L is the listed value but 0.1 mg/L is the correct value (see Table 3).

Table 2. Analytes from Table D-2A with GWGW<sub>Ing</sub> PCL values that should be considered

| Analyte                 | CASRN    | Project<br>Screening<br>Level (μg/L) | Residential<br><sup>GW</sup> GW <sub>ing</sub> PCL<br>(µg/L) |
|-------------------------|----------|--------------------------------------|--|
| Bromodichloromethane(6) | 75-27-4  | 80                                   | 15   |
| Dibromochloromethane    | 124-48-1 | 80                                   | 11   |

Table 3. Analytes from Tables D-2A and D-2B with errors

| Analyte                          | CASRN      | Project<br>Screening<br>Level (µg/L) | Residential<br><sup>GW</sup> GW <sub>Ing</sub> PCL<br>(μg/L) |
|----------------------------------|------------|--------------------------------------|--|
| [Table D-2A] Total PCBs          | 1336-36-3  | NS                                   | 0.5  |
| [Table D-2B] Hexavalent Chromium | 18540-29-9 | 0.0001                               | 0.1  |

## Screening Criteria for Sediment (Tables D-3A and D-3B)

While tables D-3A and D-3B provide several different types of sediment screening levels for consideration as the overall project screening levels, the TCEQ TRRP residential total combined sediment (TotSedComb) PCLs were not included. The TCEQ last published these PCLs

Rebecca Storms Page 3 of 6 January 16, 2018

in 2006. Since toxicity factors have changed since 2006, the TD preliminarily calculated draft PCLs with updated toxicity factors in accordance with the exposure factors listed in TRRP 24. However, it is important to note that these are draft PCLs only and that official PCLs are calculated by the Technical Support Section. Comparing these draft PCLs to the sediment tables provides sediment screening levels for 39 (of 158) analytes from Table D-3A and 2 (of 24) analytes from Table D-3B that do not have a proposed project screening level (see Tables 4 & 5).

Table 4. Analytes from Table D-3A with Draft Residential TotSed<sub>Comb</sub> PCLs that should be considered

| Analyte   | CASRN      | Project<br>Screening<br>Level<br>(mg/kg) | DRAFT<br>Residential<br><sup>Tot</sup> Sed <sub>Comb</sub><br>PCL – 2018<br>(mg/kg) |
|---|------------|--|---|
| 1,2-Dibromo-3-chloropropane                       | 96-12-8    | NS                                       | 1.78E+01  |
| 1,2-Dibromoethane (EDB)                           | 106-93-4   | NS                                       | 6.61E+03  |
| 1,2-Dibromoethane (EDB)                           | 106-93-4   | NS                                       | 6.61E+03  |
| Bromochloromethane                                | 74-97-5    | NS                                       | 2.94E+04  |
| Chloroethane                                      | 75-00-3    | NS                                       | 2.94E+05  |
| cis-1,3-Dichloropropene                           | 10061-01-5 | NS                                       | 7.35E+01  |
| Cyclohexane                                       | 110-82-7   | NS                                       | 3.67E+06  |
| Methyl Acetate                                    | 79-20-9    | NS                                       | 7.35E+05  |
| Methylcyclohexane                                 | 108-87-2   | NS                                       | 3.67E+06  |
| trans-1,3-Dichloropropene                         | 10061-02-6 | NS                                       | 2.20E+04  |
| 1,4-Dioxane                                       | 123-91-1   | NS                                       | 2.20E+04  |
| 2,2'-Oxybis (1-chloropropane)                     | 108-60-1   | NS                                       | 2.03E+02  |
| 2,4-Dimethylphenol                                | 105-67-9   | NS                                       | 3.06E+03  |
| 2,4-Dinitrophenol                                 | 51-28-5    | NS                                       | 3.06E+02  |
| 2,6-Dinitrotoluene                                | 606-20-2   | NS                                       | 2.09E+01  |
| 2-Nitroaniline                                    | 88-74-4    | NS                                       | 4.59E+01  |
| 2-Nitrophenol                                     | 88-75-5    | NS                                       | 3.06E+02  |
| 3,3'-Dichlorobenzidine                            | 91-94-1    | NS                                       | 3.16E+01  |
| 3-Nitroaniline                                    | 99-09-2    | NS                                       | 4.59E+01  |
| 4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol) | 534-52-1   | NS                                       | 1.53E+01  |
| 4-Bromophenyl-phenylether                         | 101-55-3   | NS                                       | 9.47E-01  |
| 4-Chlorophenyl-phenylether                        | 7005-72-3  | NS                                       | 9.47E-01  |
| 4-Nitroaniline                                    | 100-01-6   | NS                                       | 6.12E+02  |
| 4-Nitrophenol                                     | 100-02-7   | NS                                       | 3.06E+02  |
| Acetophenone                                      | 98-86-2    | NS                                       | 1.53E+04  |
| Benzaldehyde                                      | 100-52-7   | NS                                       | 7.35E+04  |
| Benzo(b)fluoranthene                              | 205-99-2   | NS                                       | 1.16E+02  |
| bis(2-Chloroethoxy)methane                        | 111-91-1   | NS                                       | 1.29E+01  |

| Analyte                    | CASRN     | Project<br>Screening<br>Level<br>(mg/kg) | DRAFT<br>Residential<br><sup>Tot</sup> Sed <sub>Comb</sub><br>PCL – 2018<br>(mg/kg) |
|----------------------------|-----------|--|---|
| Caprolactam                | 105-60-2  | NS                                       | 7.65E+04  |
| Carbazole                  | 86-74-8   | NS                                       | 7.11E+02  |
| Isophorone                 | 78-59-1   | NS                                       | 1.50E+04  |
| N-Nitroso-di-n-propylamine | 621-64-7  | NS                                       | 6.31E-01  |
| N-Nitrosodiphenylamine     | 86-30-6   | NS                                       | 9.01E+02  |
| Benzo(a)anthracene         | 56-55-3   | 0.0317                                   | 1.16E+02  |
| Barium                     | 7440-39-3 | NS                                       | 2.29E+04  |
| Beryllium                  | 7440-41-7 | NS                                       | 2.66E+01  |
| Thallium                   | 7791-12-0 | NS                                       | 3.57E+01  |
| Vanadium                   | 7440-62-2 | NS                                       | 8.47E+01  |
| Sodium                     | 7440-23-5 | NS                                       | 2.20E+04  |

Table 5. Analytes from Table D-3B with Draft Residential TotSed<sub>Comb</sub> PCLs that should be considered

| Analyte             | CASRN      | Project<br>Screening<br>Level<br>(mg/kg) | DRAFT<br>Residential<br><sup>Tot</sup> Sed <sub>comb</sub><br>PCL – 2018<br>(mg/kg) |
|---------------------|------------|--|---|
| Hexavalent Chromium | 18540-29-9 | NS                                       | 1.41E+02  |
| Cyanide             | 57-12-5    | NS                                       | 3.20E+02  |

## Screening Criteria for Surface Water (Tables D-4A and D-4B)

While tables D-4A and D-4B provide several different types of surface water screening levels for consideration as the overall project screening levels, including the Texas Surface Water Quality Standards (SWQS), the TCEQ TRRP Human Health Surface Water Risk-Based Exposure Levels (HH SW RBELs) were not included. The HH SW RBELs are based on current state and federal water quality standards and state drinking water criteria; these values should be used rather than just relying on the Texas SWQS. There is one analyte on Table D-4A, 1,2-dibromoethane (EDB), that has a HH SW RBEL and no proposed project screening level. There are 15 analytes with HH SW RBELs available that are lower than the proposed project screening level (14 on Table D-4A and 1 on Table D-4B) (see Tables 6 & 7).

In addition, there is a mistake on Table D-4B, the value listed for the Texas SWQS for total cyanide is incorrect. The listed value is for free cyanide, total cyanide has a HH Water and Fish value of 4  $\mu$ g/L and a HH Fish Only value of 400  $\mu$ g/L (see Table 8). There are also

Rebecca Storms Page 5 of 6 January 16, 2018

several mistakes in the SWQS Water and Fish and Fish Only values listed in Table D-4A. If these values are to remain on the table, they should be update based on the most current SWQS available (2018).

Table 6. Analytes from Table D-4A with HH SW RBEL values that should be considered

|                               |           | Project<br>Screening Level | HH SW RBEL –<br>Water & Fish |
|-------------------------------|-----------|----------------------------|------------------------------|
| Analyte                       | CASRN     | (μg/L)                     | (μg/L)                       |
| Bromoform                     | 75-25-2   | 69.1                       | 66.9                         |
| Bromomethane                  | 74-83-9   | 110                        | 100                          |
| Dibromochloromethane          | 124-48-1  | 7.6                        | 7.5                          |
| Methyl tert-Butyl Ether       | 1634-04-4 | 51000                      | 15                           |
| trans-1,2-Dichloroethene      | 156-60-5  | 4000                       | 100                          |
| 2,2'-Oxybis (1-chloropropane) | 108-60-1  | 4000                       | 200                          |
| 2,4-Dichlorophenol            | 120-83-2  | 60                         | 10                           |
| 2,4-Dinitrophenol             | 51-28-5   | 31                         | 10                           |
| 2-Chlorophenol                | 95-57-8   | 130                        | 30                           |
| 4,6-Dinitro-2-methylphenol    | 534-52-1  | 12                         | 2                            |
| Dibenz(a,h)anthracene         | 53-70-3   | 5                          | 0.0012                       |
| Isophorone                    | 78-59-1   | 1800                       | 340                          |
| Manganese                     | 7439-96-5 | 100                        | 50                           |
| Manganese                     | 7439-96-5 | 100                        | 50                           |

Table 7. Analytes from Table D-4B with HH SW RBEL values that should be considered

|                 |         | Project         | HH SW RBEL – |
|-----------------|---------|-----------------|--------------|
|                 |         | Screening Level | Water & Fish |
| Analyte         | CASRN   | (μg/L)          | (μg/L)       |
| Cyanide — Total | 57-12-5 | 5.2             | 4            |

Table 8. Analytes from Table D-4B with errors

| Analyte         | CASRN   | Human Health<br>for Water and<br>Fish<br>Consumption<br>(μg/L) | Human<br>Health for<br>Fish Only<br>Consumption<br>(μg/L) | HH SW<br>RBEL –<br>Water &<br>Fish (μg/L) | HH SW<br>RBEL –<br>Fish Only<br>(μg/L) |
|-----------------|---------|--|---|---|--|
| Cyanide – Total | 57-12-5 | 200  | NS  | 4   | 400                                    |

Rebecca Storms Page 6 of 6 January 16, 2018

### **Overall Comments**

There are several analytes in each media that either: do not have a screening value listed but do have a TCEQ TRRP value available, have a TCEQ TRRP value lower than the screening value listed, or have an error in the TCEQ values listed. It is important for the document to take into account all applicable and current TCEQ TRRP cleanup values. Use of incomplete screening values could result in COCs being inappropriately screened out of cleanup.

If you have any questions regarding this evaluation, please call me at (512) 239-2269.

cc: Toxicology Division (via e-mail), Remediation File

# **TCEQ Interoffice Memorandum**

To:

Rebecca Storms, Project Manager

Superfund Section, Remediation Division

From:

Greg Zychowski, Technical Program Support Team Division Support Section, Remediation Division

Date:

January 15, 2019

Subject:

Sampling and Analysis Plan for Remedial Investigation, Revision 00

Lane Plating Works, Inc. Federal Superfund Site

5322 Bonnie View Road Dallas, Dallas County, Texas

SUP179

December 11, 2018

I have reviewed the subject document (the "SAP," EA 2018), with a specific focus on those areas pertaining to ecological risk assessment (ERA). My review is reflected in the following comments. The SAP generally seems to align with the TCEQ's priorities for ERAs developed as a requirement of the TRRP rule (30 TAC 350.77, TCEQ 2009). No immediate responses are requested. However, the following comments and recommendations should be strongly considered during any forthcoming ERA work for the site.

#### General and Miscellaneous Comments

- 1. Groundwater-to-surface water (swGW) and -sediment (sedGW) pathways If the swGW and sedGW pathways are complete, please consider comment 2 from my previous memorandum (TCEQ 2018a) for several resources that may be valuable to the respective evaluations.
- 2. Biota and bioaccumulation studies If necessary, biota may be collected and analyzed, and site-specific bioaccumulation may be studied. Please note that the Protective Concentration Levels Database (WTAMU 2019) also includes numerous literature-derived bioaccumulation factors.
- 3. Soil sampling depths For ERA purposes, soil samples should represent the depth intervals most relevant to wildlife exposure. By 30 TAC 350.4(a)(88) and (86) in the TRRP rule (TCEQ 2009), surface and subsurface soil for ERAs encompass the 0-0.5 feet and 0.5-5 feet depths, respectively. The sampling design matrix in SAP Table A-2 identifies intervals of 0-0.5 feet and 0.5-2 feet for surface soil, and a "total depth" of 15 feet for subsurface soil. To the extent that soil samples are collected in ecologically attractive habitat, and if the TCEQ's recommendations are not adopted, the relevance of the final sampling intervals to ecological risk should eventually be explained.

Rebecca Storms January 15, 2019 Page 2

Re: SAP for Remedial Investigation, Rev. 00 Lane Plating Works, Inc. Federal Superfund Site; Dallas, Dallas County, Texas

### **Ecological Screening Values**

Several issues regarding the ecological screening values were identified, and the following comments focus specifically on these concerns. In addition to these recommendations, site representatives are highly encouraged to double-check any existing and new screening values for accuracy.

- 4. Soil screening values While the TCEQ's ecological screening benchmarks were listed for sediment (tables D-3A and D-3B) and surface water (tables D-4A and D-4B), they are not found in Table D-1A for soil. The TCEQ's ecological soil screening benchmarks (TCEQ 2018b) should be incorporated into the final ERA.
- 5. Sediment screening values (missing values) Several metals in tables D-3A and D-3B (selenium, thallium, and others) did not feature ecological screening values for sediment. These would be useful to the ERA. If screening values are not proposed, the respective chemicals of potential concern (COPCs) should be retained for further assessment in the ERA, with ecological protective concentration levels (PCLs) eventually calculated if necessary.
- 6. Sediment screening values (accuracy and clarity) The references cited for ecological screening benchmarks appear to be correct. However, at least a couple of the screening values in Table D-3A need to be revised. These include but are not necessarily limited to the ecological screening benchmarks for silver (shown as 1 mg/kg; should be 0.57 mg/kg) and Aroclor 1254 (reported as "NS"; should be 0.06 mg/kg). Site representatives should check for other inaccuracies and make corrections as appropriate.
- 7. Surface water screening values Ideally, tables D-4A and D-4B should include notes to clarify whether the surface water screening levels are based on dissolved or total concentrations, and whether segment-specific hardness and total suspended solids (TSS) values have been applied. The information on dissolved-versus-total concentrations should inform how the analytical results are reported as the ERA progresses. Additionally, the source of total and hexavalent chromium screening values should be explained in more detail. Both come from RG-263b (TCEQ 2018b), but the total chromium benchmark as reported in the SAP is based on the RG-263b trivalent chromium benchmark, while the hexavalent chromium benchmark comes from its own specific value in RG-263b.
- 8. Screening values and contract-required quantitation limits (CRQLs) The TCEQ's ecological screening benchmarks (and other TCEQ values, including Tier 1 PCLs) are occasionally lower than the CRQLs. Given the site history, this is arguably more of an issue for metals than for other analytes. The concern is especially important in cases where CRQLs exceed surface water screening benchmarks that equal (or are calculated from) the Texas Surface Water Quality Standards (30 TAC 307, TCEQ 2018c); e.g., for cadmium, copper, nickel, and selenium. Site representatives are encouraged to resolve this issue to the extent possible.

Rebecca Storms January 15, 2019 Page 3

Re:

SAP for Remedial Investigation, Rev. 00 Lane Plating Works, Inc. Federal Superfund Site; Dallas, Dallas County, Texas

#### References

Buchman, M.F. 2008. NOAA (National Oceanic and Atmospheric Administration) Screening Quick Reference Tables (SQuiRTs). Online at <a href="https://response.restoration.noaa.gov/sites/default/files/SQuiRTs.pdf">https://response.restoration.noaa.gov/sites/default/files/SQuiRTs.pdf</a>. Accessed January 3, 2019.

EA. 2018. Sampling and Analysis Plan for Remedial Investigation, Revision 00. Lane Plating Works, Inc. Superfund Site. Dallas, Dallas County, Texas. December 11, 2018.

TCEQ. 2009. Texas Risk Reduction Program (TRRP) Rule, 30 TAC 350. Effective March 19, 2009.

TCEQ. 2018a. Interoffice Memorandum. December 4, 2018. To: Rebecca Storms, Project Manager (Superfund Section). From: Greg Zychowski (Division Support Section). CSM Technical Memorandum, Revision 00. Lane Plating Works Federal Superfund Site. Dallas, Texas.

TCEQ. 2018b. RG-263b. Supporting Documentation for the TCEQ's Ecological Benchmark Tables. Guidance and benchmark tables online at <a href="https://www.tceq.texas.gov/remediation/eco/eco.html">https://www.tceq.texas.gov/remediation/eco/eco.html</a>. Accessed January 7, 2019.

TCEQ. 2018c. Texas Surface Water Quality Standards, 30 TAC 307.1-307.10. Effective March 1, 2018.

WTAMU (West Texas A&M University). 2019. Protective Concentration Levels Calculator (PCL Database). Online at <a href="https://pcl.wtamu.edu/pcl/login.jsp">https://pcl.wtamu.edu/pcl/login.jsp</a>. Accessed January 3, 2019.